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## PRE-APPEAL BRIEF REQUEST FOR REVIEW

Docket Number (Optional)

0119-022

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on 09 August 2006

Signature

Typed or printed name Krishna Kalidindi

Application Number

09/418,562

Filed

10/15/1999

First Named Inventor

Jacobus Haartsen

Art Unit

2634

Examiner

Curtis Odom

Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request.

This request is being filed with a notice of appeal.

The review is requested for the reason(s) stated on the attached sheet(s).

Note: No more than five (5) pages may be provided.

I am the

☐

applicant/inventor.

☐

assignee of record of the entire interest.

See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed.  
(Form PTO/SB/96)

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Registration number 41,461

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Registration number if acting under 37 CFR 1.34

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09 August 2006

Date

NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below\*.

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\*Total of forms are submitted.

This collection of information is required by 35 U.S.C. 132. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11, 1.14 and 41.6. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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Application No. 09/418,562  
Atty. Docket No. 0119-022

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Patent Application of	)	<b>Mail Stop AF</b>
	)	
Jacobus C. HAARTSEN	)	
	)	Group Art Unit: 2634
Application No.: 09/418,562	)	
	)	Examiner: Curtis B. Odom
Filed: October 15, 1999	)	
	)	Confirmation No. 9055
For: HOP SEQUENCE ADAPTATION	)	
IN A FREQUENCY-HOPPING	)	
COMMUNICATIONS SYSTEM	)	

**PRE-APPEAL BRIEF REQUEST FOR REVIEW**

**MAIL STOP AF**  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

In response to the Final Office Action mailed on February 9, 2006, Applicants respectfully request review of the rejections prior to Appeal for at least the following reasons. A Notice of Appeal and a Petition for Extension of Time is being filed concurrently herewith.

1. Bergstrom fails to teach using a time varying parameter to select a substitute hop channel in the present phase

Claim 1 stands rejected under 35 USC § 103(a) as allegedly being unpatentable over Bergstrom (U.S. Patent No. 4,716,573). Specifically, the Final Office Action relies on Bergstrom for disclosing if the selected hop channel belongs to a set of forbidden hop channels, then: *using a time-varying parameter to select, at the present phase, a substitute hop channel* from the set of allowable hop channels .

Bergstrom is completely silent as to using a time-varying parameter, in the present phase, to select a substitute hop channel. The portions of Bergstrom relied upon in the Office Action (col. 3, lines 13-65 and claim 1) simply do not address the phase or a time-varying parameter.

In an earlier (non-final) Office Action (dated 06/15/2005), the random number generator is analogized to a time-varying parameter when no basis for such interpretation is found in Bergstrom.

2. Bergstrom fails to teach mapping of a forbidden hop channel onto each of the allowable hop channels with equal probability

The Final Office Action also refers to Bergstrom for disclosing, if the selected hop channel belongs to a set of forbidden hop channels, then: using a time-varying parameter to select, at the present phase, a substitute hop channel from the set of allowable hop channels .  
..... *wherein a forbidden hop channel is mapped onto each of the allowable hop channels with equal probability.*

The Office Action concludes, absent any teaching or suggestion by Bergstrom, that since a substitute hop channel is chosen randomly, all hop channels have an equal probability of being randomly chosen.

The state matrix X (Fig. 2) and the corresponding description of Bergstrom does not provide information for reaching such a conclusion. Matrix X is described as containing information on presently permitting and prohibited frequencies (col. 2, lines 62-63) and is updated during a transmitting interval (col. 2, lines 59-61).

As described by Bergstrom,  $r_n$  is an integer in the interval 1 to N where N is the number of available frequencies (presumably, including both permitting and prohibited frequencies) in the frequency hopping system (col. 2, lines 62-65).

Matrix X is made up of three rows and N columns. The first row contains values for the mapping frequencies (presumably, allowable frequencies). The second row contains a quality measure, such as signal strength and jamming, of the corresponding mapping frequency. The third row contains a time index (col. 2, l. 62 - col. 3, l. 4).

When a new frequency value is generated (presumably a permitting frequency is generated as a forbidden hop channel is encountered perhaps?), the new frequency value is indicated (or, appears to be placed) in the  $r_n$ -th column (col. 3, lines 30-35).

Looking at Matrix X (not being described by Bergstrom), the frequency in the second slot is mapped to frequency in the third (next) slot. Therefore, it appears that if a prohibited frequency is encountered, then it is mapped to the next allowable frequency.

Matrix X, therefore, does not illustrate a forbidden hop channel being mapped onto each of the allowable hop channels with equal probability. Bergstrom fails to describe how

this mapping takes place including mapping a forbidden hop channel onto each of the allowable hop channels with equal probability.

At least for these reasons, Bergstrom simply fails to teach or suggest exemplary embodiments as recited in claim 1.


The deficiencies of Bergstrom are similarly applicable to claim 16.

All of the rejections having been overcome, it is respectfully submitted that this application is in condition for allowance and a notice to that effect is earnestly solicited.

A check in the amount of \$1520 is enclosed for the Notice of Appeal and the Petition for 3 month Extension of Time. It is believed no additional fees are due. If, however, the Office determines that additional fees are due, the Director is authorized to charge the additional fees to Deposit Account No. 50-2476.

Respectfully submitted,

Potomac Patent Group PLLC

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